Kimberly Cervello Rogers* (kcroger@bgsu.edu). An Activity for Unpacking Different Features of Mathematical Tasks.

In this talk, audience members will consider a sample activity from a professional development course for mathematics graduate teaching assistants (GTAs) at my institution, which develops GTAs’ ability to select and modify mathematical tasks in alignment with learning objectives. From this sample activity, session participants will explore how contrasting kinds of mathematical tasks provide different opportunities for students to be able to do and understand mathematics. When engaging with this activity, audience members will be expected to solve a few algebraic questions, consider what mathematics a student would need to know to successfully answer these questions, and explore ways that students’ incorrect responses to these questions could inform an instructor’s understanding about what students do or do not understand. Through these experiences, session participants will consider strategies for selecting and modifying tasks to align with learning goals and discuss ways to use this activity in professional development for GTAs. (Received September 24, 2018)